MAS223, Feedback on Assignment 3

Q28: Transformations of multivariate distributions

- In general this question was well done, and most people found the 'right formula' for $f_{U,V}(u,v)$. Many forgot to find out the region of the (u,v) plane in which it was non-zero.

- Some people were wrong-footed by the final part of the question, and tried to find pdfs of U and V without going via the joint pdf. The right strategy is to find $f_{U,V}(u,v)$ and then factorize it into $f_{U,V}(u,v) = f_U(u)f_V(v)$ to show independence.

Q31: Linear transformations of the bivariate normal

- Again, generally well done. Some people seemed confused by the term 'standard' normal; a normal random variable is said to be *standard* if has mean 0 and variance 1.